# Moab – Accelerate uranium mill tailings pile remediation Project Operating Plan

**BACKGROUND** 

**Recovery Act Project:** Moab Recovery Act Project

**TAFS:** 89-09/10-0335

**Project Identification Code:** 2002060

**Recovery Act Bill Reference:** PL 111-5 Title IV – Energy and Water

Development, Non-Defense Environmental Cleanup

(H.R. 1-25)

**Project Cost:** \$108,350,000

**Budget Authority:** 05949, FE.01.13.00.0

**Program Office:** Environmental Management (EM)

**Recovery Program Plan:** EM - Non-Defense

Management Office: Donald Metzler, Grand Junction Office,

don.metzler@gjem.doe.gov, 970-257-2115

**LEADS** 

**Implementation:** Environmental Management

Breakthrough: N/A Laboratory: N/A

# I. SUMMARY & OBJECTIVES

**Summary:** The scope of the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project is to relocate 16 million tons of uranium mill tailings at the former uranium-ore processing facility near Moab, Utah, by rail to an engineered disposal cell 30 miles north at Crescent Junction, Utah. The current base project is scheduled for completion in 2028, this accelerated Recovery Act work scope reduces the project completion date by 3 years to 2025. The proposed project for ARRA funding will increase the quantity of mill tailings relocated by the end of fiscal year 2011 by 2 million tons by shipping 2 trains per day 5 days per week.. This protects the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production. The acceleration fulfills EM's commitment to reduce overall risk and complete cleanup by accelerating this project by approximately three years and reducing lifecycle costs by an estimated \$72M.

**Public Benefits:** New non-federal jobs are expected to be created or retained through execution of this Recovery Act project.

**Recovery Act Project Impacts:** The Recovery Act money provided for this acceleration project will reduce lifecycle costs by approximately \$72M. In addition to reducing lifecycle costs and creating non-federal jobs, the accelerated completion of the

project (from 2028 to 2025) will reduce the risk to public health and the environment by moving tailings away from the Colorado River sooner than originally planned.

### II. WORK SCOPE CHANGES

The base program production schedule is 1 train per day, 4 days per week. The original Project Operating Plan envisioned accelerating the schedule to 1 train per day, 7 days per week. Working with Union Pacific Rail Road, the project determined that the most efficient shipping scenario is 2 trains per day, 5 days per week.

#### III. BUY-BACK WORK

Based on the potential availability of funds from unused management reserve and contingency funds and from cost efficiencies in executing the planned projects, additional candidate projects have been identified should funding become available:

- Continue the accelerated production/shipment schedule currently being achieved with ARRA funding.
- Continue the accelerated schedule of 10 shipments per week.

### IV. COST & SCHEDULE

### **Budget**

Table 1: Budget Implementation Monthly Obligations (actual obligations to contractors for Apr 2009 through Feb 2010 and projected obligations to contractors for Mar 2010 through Sept 2010) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2. Budget Implementation Actual and Planned Monthly Expenditures( actual costs for Apr 2009 through Feb 2010 and projected costs for Mar 2010 through Sept 2011 and then, if applicable, projected annual expenditure in FY2012) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

Table 3: Milestones Moab Recovery Act Project		
Milestones	DATE	
Initial Recovery Act Funds Distribution/obligate funds	5/19/2009	
Start hiring	5/19/2009	
Start accelerated tailings haul (22 cars / 1 train per day)	6/19/2009	
Start hiring for ramp-up scenario (22 cars / 5 days/2 trains per day)	7/31/2009	
Increase to 2 trains per day (22 cars/5 days/2 trains per day)	8/17/2009	
Obligate final recovery act funds	Sep-09	
Complete Overpass on SH279	12/18/2009	
Complete hiring for ramp-up scenario (34 cars / 5 days/2 trains per day)	10/31/2009	
Start 34 cars / 5 days/2 trains per day accelerated haul	11/16/2009	
Haul 854k tons of tailings	5/29/2010	
Haul 1M tons of tailings	8/10/2010	
Haul 1,250k tons of tailings	10/8/2010	
Haul 1,500k tons of tailings	1/17/2011	
Haul 1,750k tons of tailings	4/22/2011	
Haul 2M tons of tailings	6/19/2011	

# **V. PERFORMANCE**

### **Performance Measures**

All cost and schedule estimates depend on when funding is made available and contract actions are complete. Table 4 reflects performance targets for FY 2010 and FY 2011 work scope. However, the Moab Recovery Act Project also includes work scope performed in FY 2009.

Table 4: Project Performance Targets		
Moab Recovery Act Project		
Recovery Act Project Identification	2002060	
Code		
Linkage To S-1 Priorities	Create jobs and accelerate environmental	
	clean-up of legacy waste	
Linkage to Current Program Goal	DOE Strategic Goal 4 – Environmental	
(if applicable)	Responsibility – Protecting the environment	
	by providing a responsible resolution to the	
	environmental legacy of nuclear weapons	
	production.	

	EM Strategic Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come
Three-Year Outcome-Oriented	Dispose of an additional 2.0M tons of
Performance Measure	tailings and create/retain jobs
E' (V D C T (EVO)	D: 6.03.965 t
First Year Performance Target (FY09	Dispose of 93,865 tons of tailings
Accomplishments)	
Second Year Performance Target	Dispose of an additional 1,149,027 tons of
(FY10)	tailings
Q1 - Project-Level Quarterly	Dispose of 175,228 tons of tailings
Performance Milestone(s)	
Q2 - Project-Level Quarterly	Dispose of 204,026 tons of tailings
Performance Milestone(s)	
Q3 - Project-Level Quarterly	Dispose of an additional 387,566 tons of
Performance Milestone(s)	tailings
Q4 - Project-Level Quarterly	Dispose of an additional 382,207 tons of
Performance Milestone(s)	tailings
Third Year Performance Target	Dispose of an additional 757,108 tons of
(FY11)	tailings by the end of the third year.
Q1 - Project-Level Quarterly	Dispose of an additional 236,211 tons of
Performance Milestone(s)	tailings
Q2 - Project-Level Quarterly	Dispose of an additional 202,976 tons of
Performance Milestone(s)	tailings
Q3 - Project-Level Quarterly	Dispose of an additional 317,921 tons of
Performance Milestone(s)	tailings
Q4 - Project-Level Quarterly	NA
Performance Milestone(s)	

### **Collaboration and Coordination**

The project involves accelerating tailings transport by increasing the number of rail cars per train from 22 to 34 and by increasing the number of train shipments from 4 to 10 trains per week. Coordination with state and local government entities already occurs but will be enhanced due to the accelerated nature of the Recovery Act project.

• State Government Utah Department of Transportation (UDOT): Trucks carrying containers between the mill tailings pile and the rail loading area must cross State Highway 279.

Coordinating with UDOT, the project built an underpass under SH279

• Local Government Grand County, Utah: The project also coordinated with the

county for building the underpass.